HINTS Proposal

Working Title: Searching for cancer-related information: How does the American public rate its experience?

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Brief description: This paper has the following purposes:

1. To explore the characteristics of the American people who seek cancer-related information.

Dependent variable:
HC-9: Have you ever looked for information about cancer from any source? Yes/No
HC-10: Excluding your doctor or other health care provider, has someone else ever looked for information about cancer for you? Yes/No
We might either look at HC-9 alone or create a three-level variable based on HC-9 and HC-10: Looked for cancer information myself, someone else looked for cancer information for me but I never looked myself, never looked for cancer information.

Independent variables:
We will explore differences among those who seek cancer information and those who don't on the following key variables –
Patient sociodemographics: age (HE-12/13), gender (HE-14), employment status (DM-1), marital status (DM-2), race/ethnicity (DM-4/5), education (DM-6), income (DM-7), insurance status (HS-5).
Clinical variables: cancer history – This is a three-level variable created by combining responses to CH-1 and CH-4: personal history, family cancer history only, no cancer history.

Analysis strategy:
Bivariate chisquare analyses and multiple logistic or multinomial regression analyses will be conducted, depending upon the levels of the dependent variable.

In addition to the above analyses, we will also summarize the broad areas/categories of cancer-related information sought by the American public (HC-14).

2. To evaluate how the American public rates its experience of seeking cancer-related information.

a. Describe the development and evaluation of a scale that assesses the American public's rating of its cancer-related information seeking experience.

HC-19 includes 7 items that assess a person's rating of his/her experience of seeking cancer-related information. These items include evaluation of both the _process_ of seeking information (wanted more information, but didn't know where to find it; process took a lot of effort; did not have time to get all the information; felt frustrated with the process of seeking cancer information) and the _outcome_ of the information seeking process, i.e., rating of the information found (was concerned about the quality of the information; information was hard to understand; was satisfied with the information found).

Analysis strategy:
Principal Components Analysis (PCA) will be conducted to examine the factor structure of this scale (we expect a single factor solution to be obtained).

Confirmatory factor analysis will be conducted to confirm the uni-dimensionality of the scale. The factor structure of the scale may also be examined separately among subjects with a cancer history and those without.

Further validation of the scale may be conducted by assessing differential item functioning for all the items among those who answered the items in English versus those who answered the items in Spanish as well as by any other variable of interest such as gender, cancer history, and education.

Scores for items that are retained based on the above analyses will be summed to create a composite score for the Information Seeking Experience Evaluation (ISEE) scale. Score distribution of the individual items and that of the composite scale will be presented along with other relevant psychometric properties.

b. Examine predictors of the American public's rating of its cancer-related information seeking experience.

Dependent variable:
ISEE scale score.

Independent variables:
Patient sociodemographics: age, gender, living status, marital status, race/ethnicity, education, income, insurance status.
Clinical variables: cancer history, health status.
Information seeking variables: how long ago did you last look for cancer information (HC-12), where did you look first (HC-13), what type of information were you looking for (HC-14)

Analysis strategy:
Bivariate correlations, bivariate ANOVAs, and multiple linear regression models will be estimated.

3. To explore the potential consequences/impact of the American public's satisfaction or dissatisfaction with its cancer-related information seeking experience.

In this subsection, we will explore whether and to what extent people's past positive or negative information seeking experiences impact their current information seeking self-efficacy (HC-15A), their current cancer-related knowledge (final items to be decided), their perceived cancer risk (CK-8/9), and their overall perceptions about causes of cancer and its prevention (CK-14 a,b,c).

The moderating effect of cancer history on the association between satisfaction with information seeking and the above variables will also be examined.